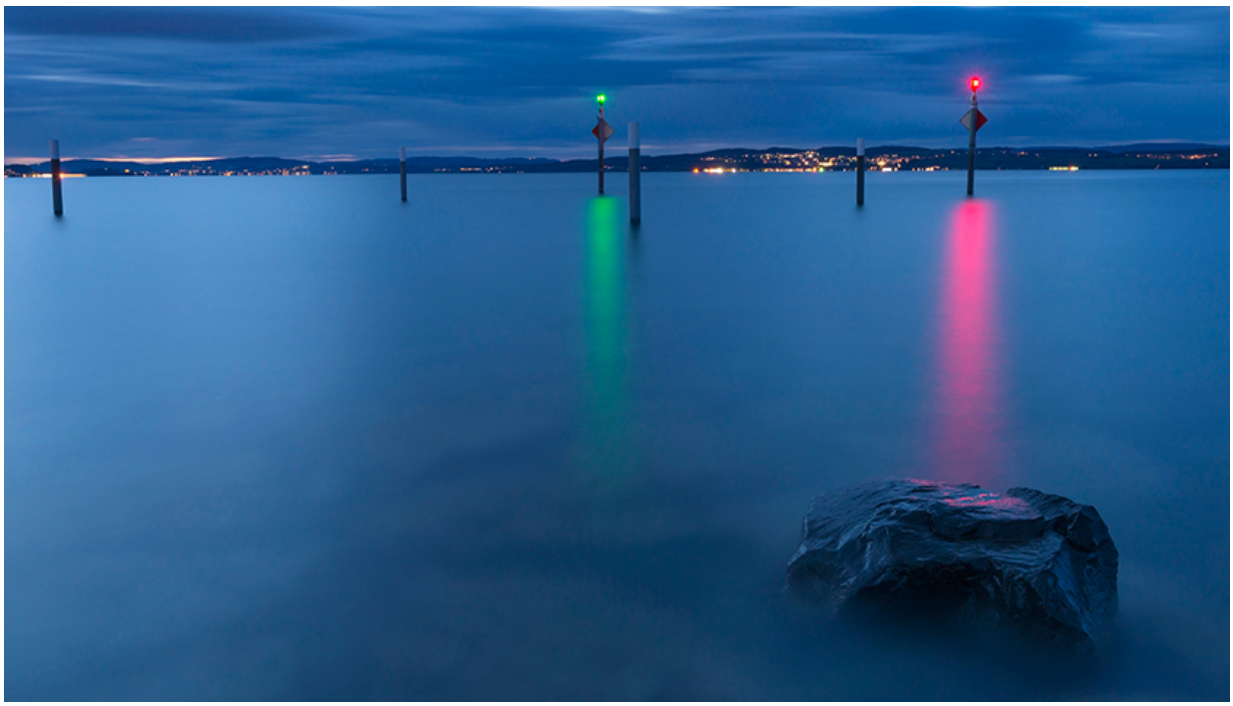
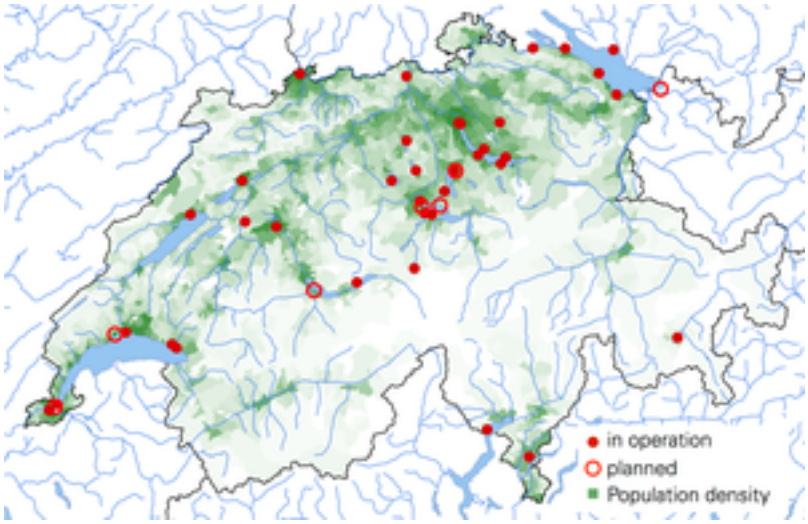


Good arguments for thermal use of surface waters in Switzerland

March 16, 2017 | Andres Jordi
Topics: Climate Change & Energy | Ecosystems

Switzerland's surface waters contain vast amounts of thermal energy which could be used for heating or cooling. Based on numerous studies, Eawag scientists have now estimated the ecological impacts of thermal use. They conclude that, in general, ecosystems are not adversely affected by a slight reduction in water temperature due to use of lake water for heating in the winter. However, an increase in temperature due to discharges of cooling water in the summer may sometimes be problematic for temperature-sensitive species such as the trout. These species already have to contend with the effects of climate change in some waterbodies, and their ability to compete could be further reduced by additional warming. But, according to the researchers, as long as ecological requirements are taken into account in the planning process, sustainable thermal use is possible and can be recommended in the case of deep lakes and large rivers.

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In Switzerland, a number of lake-water heating or cooling systems are already in operation and others are planned
(Graphic: Swisstopo/Eawag)

Related to this topic:
There is an Practice-oriented course at Eawag (PEAK) on November 8, 2017,
Using Lakes for heating and cooling, PEAK V44/17.
Further information

Related Files

Gaudard A. et al. (2017): Utilisation thermique des eaux superficielles. Aqua & Gas 3, 49 – 54 (in French) [pdf, 813 KB]

https://www.eawag.ch/en/info/portal/news/news-archive/archive-detail/good-arguments-for-thermal-use-of-surface-waters-in-switzerland

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